

We Claim:

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1. In a computer network a display device apparatus comprising:
a display surface; and
a display manager for determining what messages are displayed on the display surface, said display manager receiving messages for display on the display device from multiple network devices, said display manager prioritizing the received messages to determine a sequence in which said received messages are displayed on the display surface.

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2. The apparatus of claim 1 wherein said display device and said network devices communicate over an Internet Protocol (IP) based network.

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3. The apparatus of claim 1 comprising:
a selected one of said network devices registered with said display device, said display manager registering said display device in a list maintained by said display device, said registration occurring prior to said display device displaying any messages from said network device.

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4. The apparatus of claim 3 wherein said display manager registers a plurality of said network devices with said display device.

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5. The apparatus of claim 4 comprising:
a separate priority message queue created on said display device for each network device registered with the display device;
wherein each priority message queue has a priority level assigned to it; and
wherein a display message received by the display device from a given one of the network devices, is placed in a priority message queue that is assigned to said network device.

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6. The apparatus of claim 5 wherein the display message placed in said priority message queue contains text.

7. The apparatus of claim 5 wherein the display message placed in said priority message queue contains a graphical image.

5 8. The apparatus of claim 5 wherein the display message placed in said priority message queue message contains text and a graphical image.

9. The apparatus of claim 5 further comprising:

10 said display manager assigning a Message Identification number to said display message placed in said priority message queue; and

said display manager assigning a message priority level to said display message as it is placed into said priority message queue, said message priority level being encoded into said display message when received by said display manager and extracted by said display manager.

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10. The apparatus of claim 9 further comprising:

said display manager selecting a selected priority message queue with a highest priority level, said selected priority message queue containing at least one message;

20 said display manager selecting a selected display message with a highest message priority level from within said selected priority message queue with a highest priority level; and

said display manager displaying said selected display message with a highest priority level on the display surface of said display device.

25 11. The apparatus of claim 9 wherein said display manager removes a selected display message in a priority message queue in response to a request from said network device.

12. The apparatus of claim 9 wherein said display manager maintains a list of Message Identification numbers of all of the messages in a priority message queue assigned to a particular network device, said display manager providing said list to said particular network device in response to a request from said particular network device.

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5 14. The apparatus of claim 9 wherein said display manager provides the status of a
selected display message in a priority message queue assigned to a network device to
said network device in response to a request from said network device.

10 15. The apparatus of claim 9 wherein said display manager displays a display message
with display characteristics that were encoded within said display message when
received by said display device.

15 16. In a motor vehicle, a display device apparatus interfaced with a network located
within said motor vehicle, said apparatus comprising:
a display surface mounted on the motor vehicle dashboard; and
a display manager for determining what messages are displayed on the display
surface, said display manager receiving messages for display on the display device from
multiple network devices connected to said network located within said motor vehicle,
said display manager prioritizing the received messages to determine a sequence in
20 which said received messages are displayed on said display surface.

17. The apparatus of claim 16 wherein
said display device and said network devices communicate over an Internet
Protocol (IP) based network.

25 18. The apparatus of claim 16 comprising:
a selected one of said network devices registered with said display device, said
display manager registering said display device in a list maintained by said display
device, said registration occurring prior to said display device displaying any messages
30 from said network device.

19. The apparatus of claim 18 wherein said display manager registers a selected one of said network devices, said network device being a global positioning satellite receiver.
20. The apparatus of claim 18 wherein said display manager registers a selected one of said network devices, said network device being a cellular phone.
21. The apparatus of claim 18 wherein said display manager registers a selected one of said network devices, said network device being an automobile stereo.
22. The apparatus of claim 18 wherein said display manager registers a plurality of said network devices with said display device.
23. The apparatus of claim 22 further comprising:
a separate priority message queue created on said display device for each network device registered with the display device;
wherein each priority message queue has a priority level assigned to it; and
wherein a display message received by the display device from a given one of the network devices is placed in a priority message queue that is assigned to said network device.
24. The apparatus of claim 23 wherein the display message placed in said priority message queue contains text.
25. The apparatus of claim 23 wherein the display message placed in said priority message queue contains a graphical image.
26. The apparatus of claim 23 wherein the display message placed in said priority message queue message contains text and a graphical image.

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27. The apparatus of claim 23 further comprising:

said display manager assigning a Message Identification number to said display message placed in said priority message queue; and

5 said display manager assigning a message priority level to said display message as it is placed into said priority message queue, said message priority level being encoded into said display message when received by said display manager and extracted by said display manager.

10 28. The apparatus of claim 27 further comprising:

said display manager selecting a selected priority message queue with a highest priority level, said selected priority message queue containing at least one message;

15 said display manager selecting a selected display message with a highest message priority level from within said selected priority message queue with a highest priority level; and

said display manager displaying said selected display message with a highest priority level on the display surface of said display device.

20 29. The apparatus of claim 27 wherein said display manager removes a selected display message in a priority message queue in response to a request from said network device.

25 30. The apparatus of claim 27 wherein said display manager maintains a list of Message Identification numbers of all of the messages in a priority message queue assigned to a particular network device, said display manager providing said list to said particular network device in response to a request from said particular network device.

30 31. The apparatus of claim 27 wherein said display manager maintains a list of network devices registered with said display device, said display manager removing a selected network device from said list in response to a request from said selected network device.

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32. The apparatus of claim 27 wherein said display manager provides the status of a selected display message in a priority message queue assigned to a network device to said network device in response to a request from said network device.
- 5 33. The apparatus of claim 27 wherein said display manager displays a display message with display characteristics that were encoded within said display message when received by said display device.
34. In a motor vehicle, a display device apparatus interfaced with a network located
10 within said motor vehicle, said apparatus comprising:
a display surface; and
a display manager for determining what messages are displayed on the display surface, said display manager receiving messages for display on the display device from multiple network devices connected to said network located within said motor vehicle,
15 said display manager prioritizing the received messages to determine a sequence in which said received messages are displayed on said display surface.
35. The apparatus of claim 34 wherein
said display device and said network devices communicate over an Internet
20 Protocol (IP) based network.
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